### STUDIES IN THE EUPATORIEAE (ASTERACEAE). LV.

#### THE GENUS, DIMORPHOLEPIS.

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The concept recognized here at the generic level is only slightly altered from the section as established by Barroso in 1950. All species have the characteristic narrow elongate phyllaries in the outer series. The genus is easily distinguished from its closest relatives, <u>Symphyopappus</u> differs by having glabrous and ridged pedicels and <u>Disynaphia</u> differs by having alternate usually narrow leaves. Some species of <u>Dimorpholepis</u> also differ from these related genera by having dissected leaves.

The genus <u>Dimorpholepis</u> itself consists of three closely related but rather distinctive subgroups. The species <u>D</u>. <u>multida</u> has a pappus only about half as long as the corolla and lacking a distinct fused band at the base. This same species has an obsolete carpopodium as in <u>Disynaphia</u> and longer hairs interspersed among the shorter hairs on the pedicels. The typical element including <u>D</u>. <u>grazielae</u> and <u>D</u>. <u>mollissima</u> is also rather distinctive in its ovate leaf blades, longer peticles and sometimes trailing habit. The dissected leaves are found in various members of the genus, <u>D</u>. <u>multifida</u>, <u>D</u>. <u>anethifolia</u> and in some varieties of D. guadichaudiana.

Dimorpholepis (G.M.Barroso) R.M.King & H.Robinson, new status, <u>Eupatorium</u> section <u>Dimorpholepis</u> G.M. Barroso, Arquivos do Jardim Botanico 10: 97. 1950.

Coarse herbs to subshrubs or shrubs, erect to trailing, few branched. Leaves opposite, short petioled, ovate to lanceolate pinnately to bipinnately dissected into narrow segments often serrate. Inflorescence a corymbose panicle. Involucre of ca. 15 unequal phyllaries, in 3-4 series, receptacle flat or slightly convex, glabrous, 5 flowers per head, corollas tubular, 5 lobed, outer surface with a few short stalked glands, lobes longer than wide, short papillose on the backs of the lobes, short hairs on backs of lobes, stomates absent. Inner surface of corollas glabrous, anther collar short, composed of mostly quadrate or rectangular cells with annular thickenings. Anther appendage large, composed of large cells, base of anther hastate. Style base not enlarged, glabrous. Stylar appendage slightly enlarged, papillose. Achenes prismatic, 4-5 ribbed,

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often with a few short stalked glands and short setae, carpopodium obsolete or composed of numerous enlarged thin walled cells continuous on the lower ribs; pappus of ca. 20-30 persistent scabrous setae, apical cells acute. Chromosome number determined from one species (D. <u>intermedia</u> as X = 10, Coleman, 1968). Type species: <u>Eupatorium dimorpholepis</u> Baker = <u>Dimorpholepis grazielae</u> R.M.King & H.Robinson.

Our studies of the genus indicate that it contains the following 9 species.

- Dimorpholepis anethifolia (A.P.Decandolle) R.M.King & H.Robinson, comb. nov. Eupatorium anethifolium A.P.Decandolle, Prod. 5: 182. 1836. Brazil.
- Dimorpholepis coriacea (Scheele) R.M.King & H.Robinson, comb. nov. <u>Eupatorium</u> coriaceum Scheele, Linnaea 18: 457. 1844. Brazil.
- Dimorpholepis gaudichaudeana (A.P.Decandolle)R.M.King & H. Robinson, comb. nov. <u>Eupatorium</u> gaudichaudeanum A.P.Decandolle, Prodr. 5: 148. 1836. Brazil.
- Dimorpholepis grazielae R.M.King & H.Robinson, nom. nov. <u>Eupatorium dimorpholepis</u> Baker, Mart. Fl. Bras. 6(2): 331. 1876. Brazil.
- Dimorpholepis intermedia (A.P.Decandolle) R.M.King & H.Robinson, comb. nov. <u>Eupatorium intermedium</u> A.P.Decandolle, Prodr. 5: 148. 1836. Brazil.
- Dimorpholepis mollissima (Sch.-Bip. ex Baker) R.M.King & H. Robinson, comb. nov. <u>Eupatorium mollissimum</u> Sch.-Bip. ex Baker, Mart. Fl. Bras. 6(2): 331. 1876. Brazil.
- Dimorpholepis multifida (A.P.Decandolle) R.M.King & H.Robinson, comb. nov. <u>Eupatorium multifidum</u> A.P.Decandolle, Prodr. 5: 182. 1836. Brazil.
- Dimorpholepis numnularia (Hook. & Arn.) R.M.King & H.Robinson, comb. nov. <u>Eupatorium numnularia</u> Hook. & Arn., Hook. Comp. Bot. Mag. 1: 241. 1835. Brazil.
- Dimorpholepis serrata (Spreng.) R.M.King & H.Robinson, comb. nov. <u>Eupatorium serratum</u> Spreng., Syst. 3: 415. 1826. Argentina, Brazil, Uruguay.

References

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Barroso, G.M. 1950. Considerações sôdre o gênero <u>Eupatorium</u>. Arquivos do Jardim Botanico 10: 13-116.

Coleman, J.R. 1968. Chromosome numbers in some Brazilian Compositae. Rhodora 70: 228-240.

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